Entrepreneurship and equity crowdfunding: A research agenda

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Entrepreneurship and Equity Crowdfunding: A Research Agenda

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Introduction

The imperfections of capital market caused by the uncertainty of investment returns, the asymmetric information between entrepreneurs and potential investors, and the lack of collateral available to entrepreneurs create financial constraints and funding gaps for new ventures (Carpenter & Petersen, 2002; Hellmann, 2007; Chen et al., 2009; Kirsch et al., 2009). Such imperfections have a negative impact upon the provision of early-stage finance and limit the ability of new ventures to develop their inventions and knowledge into practical commercial applications (Lindstrom & Olofsson, 2001; Widding et al., 2009). It is, therefore, difficult for new ventures to gain access to external finance in the early stages of development because traditional investors (e.g. banks, business angels and venture capitalists) are attracted to the more cost effective and less risky investments available in established firms. Thus, entrepreneurs usually utilise their own capital or that from family and friends to finance proof-of-concept and other early star-up costs (Dushnitsky & Shapira, 2010).

Within the context of start-up finance, Shane and Cable (2002) and Zhang and Wong (2008) have suggested that social networks may provide a solution to early-stage finance gaps leading to an assumption that online social networks could provide access to a new funding stream referred to as crowdsourcing. Latterly, Shiller (2013) indicated that resources dispersed over millions of people must be activated to successfully grow an economy and crowdsourcing is one means by which this can be achieved.

A great deal of interest has recently been paid to crowdsourcing among scholars in management and entrepreneurship studies. While most early contributions focused on crowd resources (Hempel, 2006; Howe, 2006), more recent works have focused upon the contribution a crowd can make to "open innovation", a combination of open resources and innovation concepts (Gruber & Henkel, 2006), and the ability of the crowd to collate financial resources (Cumming & MacIntosh, 2006; Ordanini et al., 2011). Moreover, the rising interest in crowdfunding is evidenced by the increasing number of refereed journal articles being published that cover a diverse range of themes, including process, platforms, the dynamics of operation (Ordanini et al., 2011; Wieck et al., 2013; Mollick, 2014), and regulations that manipulate the relations between financial receivers and crowd funders (Bradford, 2012; Lehner, 2013; Stemler, 2013).

Crowdfunding, therefore, seeks to overcome the problems faced by new ventures by utilizing a large dispersed audience, 'the crowd', to contribute relatively small sums of money by using an open call, commonly through the internet (Sigar, 2012; Lehner, 2013; P. Belleflamme et al., 2014). Crowdfunding has been used for various purposes, for example to fund research projects (Cameron et al., 2013; Loucks, 2013), film, music and game projects (Sorensen, 2012; Weigmann, 2013), and new firm start-ups (Ibrahim & Verliyantina, 2012; Lehner, 2013).

Shiller (2013) has suggested that the funding issues faced by start-ups can, potentially, be resolved by an innovative method of securitization namely equity crowdfunding. This is because the process has the opportunity to increase the number of investors and the amount invested, and also change the investor/investees relationship due to changes in investor objectives and investor interference. This is emphasised by a comment made by President Obama, "for start-ups and small businesses, this bill is a potential game changer", upon signing the JOBS (Jumpstart our business start-up) act (Mollick, 2014). However, being new phenomena, our understanding about the nature of equity crowdfunding and its contributions to entrepreneurial activities are explorative. Thus, this study attempts to survey and draw together the equity crowdfunding element of entrepreneurship studies, to review the past research in this field, and to outline opportunities for potential further research in equity crowdfunding within the entrepreneurship context.

In doing so, a systematic review (Tranfield et al., 2003) and a 'fit for purpose' methodology (Macpherson & Jones, 2010) are adopted to categorize and classify the existing literature in order to collate a knowledge base that summarises our current understanding of the crowdfunding phenomena. This paper then reviews the diffusion of equity crowdfunding in entrepreneurship studies which have been published in Social Sciences Citation Index (SSCI) and elsewhere up to December 2014. To undertake the research, 'protocol driven' and 'snowballing' methods (Greenhalgh & Peacock, 2005) have been employed. Because crowdfunding is a new research domain and only a minority of academic articles specifies equity crowdfunding, this paper will collect all papers with titles, abstracts or keywords containing the expression 'crowdfunding' published in the SSCI and Business Source Complete databases. These papers have been systematically reviewed to construct a knowledge base of equity crowdfunding. An initial set of 77 papers were obtained; however, 38 papers were excluded from the study as they were either short essays or represented personal reflections. Thus, in total, this study reviews 39 papers published by the end of 2014.

All collected literature was read to identify the core themes of research in relation to equity crowdfunding; these were identified as equity crowdfunding within an entrepreneurial context, fund receivers (entrepreneurs), crowdfunders, and regulatory environment (the government). To present the findings of this study, the paper firstly describes how crowdfunding was conceptualised in management studies before exploring the notion of equity crowdfunding as an alternative source of funding for early stage firms. This will be undertaken through an analytical comparison between equity crowdfunding and other, more established sources of funds. The paper will scrutinize equity crowdfunding within the context of early stage firms from the perspective of the investor, entrepreneur and government to highlight the contribution made by equity crowdfunding and possible gaps in the literature. Finally, the paper suggests a research agenda that is based upon the adoption of agency theory (Arthurs & Busenitz, 2003), signalling theory (B. L. Connelly et al., 2011), and behaviour theory (Brian L. Connelly et al., 2010) to explore, investigate, and further develop our understanding about equity crowdfunding and how it contributes to enterprises.

Crowdfunding Conceptualization

The concept of crowdfunding originates from the disciplines of micro-finance and crowdsourcing, but contains unique features facilitated by the rapid growth of the Internet (Poetz & Schreier, 2012; Sorensen, 2012; Mollick, 2014). Crowdsourcing relates to activities in which a large group of participants (i.e., individuals, institutions, non-profit organization, or companies) respond to a flexible open call by undertaking voluntary tasks (Howe, 2006; Brabham, 2009; Bayus, 2013; 2013; Schwartz, 2013; P. Belleflamme et al., 2014). Crowdsourcing can benefit participants by creating a context in which ideas can be generated and, through the creation of networks, provide feedback on those ideas, facilitate product development via the testing of early prototypes through to the funding of the process (Brabham, 2009). It also triggers a new model of business development in which the crowd is mobilised to support a new venture as active customers, investors or both (P. Belleflamme et al., 2014).

External investment is often the catalyst that transforms an idea into a commercial offering, however entrepreneurs often find that investors, either through equity or debt, are very circumspect about understanding the risks associated with new ventures (Riedl, 2013). As a consequence, informal external investment associated with the friends and family of the founder, or other high net worth individuals (business angles) is already far more important than other forms of funding, and crowdfunding has the potential to enhance this form of investments (Lehner, 2013). Crowdfunding, as a part of crowdsourcing, is to raise capital directly through investments from large groups of interested people either as a donation or in consideration of some reward (Ordanini et al., 2011; Schwartz, 2013).

In fact, crowdfunding model has been historically utilised to collect small amounts of money from many people for the charitable purposes and social cooperation (Ordanini et al., 2011). The successful services of intermediaries (e.g. Kickstarter, Indiegogo, and Crowdcube) in organizing crowdfunding activities attest the viability of this vehicle of attracting investment (Ordanini et al., 2011); in addition, the levels of investment from crowdfunding platforms have significantly increased suggesting that the new method of mobilising informal investment has considerable scope in the future (Paul Belleflamme et al., 2013).

From crowdfunding to equity crowdfunding

Crowdfunding has been classified into various models. For example, Larralde and Schewienbacher (2012) identify three crowdfunding models: donation, passive and active investments. Donation crowdfunding model in which the crowd does not receive any kind of return has been used for long time for the charitable purposes or non-profit institutions (Lehner, 2013). The passive crowdfunding model involves some rewards for investors, such as products, honorary recognition or other forms of revenue shares, while the investors in the active crowdfunding models not only provide money but also bring the best manner of open sources. Other authors (2013; Wieck et al., 2013; P. Belleflamme et al., 2014; Mollick, 2014) have categorised crowdfunding into four types: donation (patronage), reward, lending, and equity models and this approach seem to be most popular with scholars, governments and practitioners. Reward model in which entrepreneurs offer different nonfinancial rewards, for example acknowledgements, products, services, or creative rewards in return for investments is the most prevalent. In this model, crowdfunders are often treated as early customers, able to access product at an earlier date and offered better prices and/or other special benefits. This kind of pre-selling product model is a common choice of entrepreneurs who are producing novel software, hardware, or consumer products. Lending (debt) model allows crowdfunders to lend money to and receive interest and the return of the principle loaned after some fixed term. Finally, start-ups or SMEs utilise equity to offer part ownerships and shares of any future profits made by new venture to third parties in exchange for a cash injection (Schwartz, 2013; Mollick, 2014).

However, Lehner (2013) believes that donation is saturated because the number of crowdfunding initiatives and platforms for this funding market increase rapidly; and when the crowd can actually become shareholders of new ventures donation becomes less important alternative market. Additionally, studying individual crowdfunding practices, Paul Belleflamme et al. (2013) found that donation-based crowdfunding model has become less common in practices, and most of crowdfunding projects offer either non-financial rewards (final products or tokens of appreciation) or financial compensations (equity or profit-share arrangement). In pre-order model, when the amount of capital required is significant, the entrepreneur will reduce the offering prices to attract more participants. However, when the distortion is too large, the pre-order model is unlikely to be the best choice (P. Belleflamme et al., 2014).

According to P. Belleflamme et al. (2014), for larger capital needs, entrepreneurs prefer investments from investors rather than through pre-sales or reward in returns. It is because the rewarding function in the reward (pre-order) model limits the interaction between a new venture and its investors (Lehner, 2013). In such cases, profit-shared model, thus, seems to generate more benefits to crowdfunders. The choice between debt and equity finance of investors and entrepreneurs is influenced by the stage and phase of ventures, aspects of risk dispersion, legal regulations, cooperate governance and reputation (Kreiser et al., 2010).

However, the equity model essentially democratises the financing activities by allowing all kinds of investors with various characteristics and deferent levels of wealth become venture capitalists (Shiller, 2013). Thus, it becomes more unavoidable (Larralde & Schewienbacher, 2012) and is one of current financial innovation to allow simple projects to raise needed capital (Shiller, 2013). However, because the equity model requires a control of high-level regulation (Mollick, 2014) but current regulations in many countries are incomplete, it is less preferred than other models in such countries (Lehner, 2013).

Equity crowdfunding vs. Traditional financing methods

Traditional finance (provided by banks, business angels, venture capitalists) typically involves only a few experienced people or institutions rather than a large group of individuals. In contrast, because basing upon the internet, an equity crowdfunding campaign can easily and quickly reach potential investors than a traditional method does (Schwartz, 2013). Thus, the costs and risks per investor in equity crowdfunding projects are significantly lower than in public offering, business angel and venture capital models (Ordanini et al., 2011).

It is free for registration and lower cost to promote an equity crowdfunding project via the internet. The registration requirements and regulatory accompanying a public securities offering are too onerous; registration costs for public offering generated by the compliance with the extensive securities laws and regulation are too expensive and disproportionately burdensome on small offerings of entrepreneurs (Lehner, 2013). Using a public offering of equity also incurs significant costs for entrepreneurs as a consequence of the necessary due diligence (Lehner, 2013). Additionally, the promotion costs that call for public relations, catering, travel, printing, and many other types of specialists are expensive endeavours. Furthermore, equity crowdfunding issuers can avoid the costs for quarterly or annually obligational audited reports (Schwartz, 2013). Instead of using the author's to-be-written book, equity crowdfunding takes the concept of one step further which allows entrepreneurs and investors to find one another on the internet (Schwartz, 2013). In general, the outweigh-benefit costs may discourage and prevent entrepreneurs from raising capital from public offering (Cumming & Johan, 2013).

Furthermore, the high investment thresholds, inability to diversify portfolio investments, investment costs (Loucks, 2013), the limited number of solicited investors and actual investors, and the minimum wealth requirements of investors preclude many venture capitalists and business angels from investing to emerging growth companies (Cumming & Johan, 2013). Thus, Loucks (2013) suggested a critical need for the bridge of financial market through the equity crowdfunding model. It is because equity crowdfunding allows the small and high-risk projects to be funded by both small and big investors (Riedl, 2013), and helps entrepreneurs to collaborate with investors to undertake their entrepreneurial projects and manage new ventures (P. Belleflamme et al., 2014). The benefits of an equity crowdfunding model are not only the financial aspect but also additional contributions into production, promotion and distribution made by the crowd (Sorensen, 2012). However, Sigar (2012) indicated that equity crowdfunding projects per se contain high risks with the uncertainties of crowdfunders about the project's legitimacy and development of products or services. They also have a high rate of failure and may face administrative and accounting challenges that require meticulous and laborious bookkeeping of a large number of shareholders.

Equity crowfunding: Crowdfunder, founder, and government perspectives

Crowdfunders

The investment process in an equity crowdfunding model may go through three distinct phases (Ordanini et al., 2011). First, approximate half of the target capital will be obtained quickly by the rapid and significant investments from those have direct links with the projects or their creators, such as friends or family. The second phase is normally a more gradual growth of investment created by the desirability of the pitch and through word-of-mouth. Many projects fail at this phase primarily because of the inability to trigger the interest of the crowd. Finally, the investments will come from others who can access to the called project through the internet.

Through the conduit of the internet, equity crowdfunding is able to mobilise social networks in which online participants can share information, knowledge and suggestions, or select initiatives to support and provide financial capital (Ordanini et al., 2011). It is the participation by the crowd that creates the interest in social media that will attract more potential funders to the crowdfunding platform (P. Belleflamme et al., 2014). It is through these processes that entrepreneurs can have a global reach and access crowdfunders (S. A. Zahra et al., 2008; Shaker A. Zahra et al., 2009; Lehner, 2013).

In equity crowdfunding, the opportunity of an initiative has to be not only identified by entrepreneurs but also recognised and evaluated by the crowd (Lehner, 2013). Unlike other traditional investors, crowdfunders are unlikely to use any analytic software tool to evaluate the feasibility and commercial potential of projects (Riedl, 2013). Thus, entrepreneurs are suggested to use various instruments and strategies to communicate with a mass of heterogeneous people who can passively listen to available information or actively look for opportunities to make their commitment decisions (Lehner, 2013).

The involvement of a crowdfunder is based upon his/her own personal motivations (Lehner, 2013) will shift between passive and active depending upon the individual's motivation since, besides providing financial resources, they can contribute ideas, information and solutions, and support the start-up process (Larralde & Schewienbacher, 2012). In an equity crowdfunding project, even contributing non-trivial amounts of money to early-stage ventures, crowdfunders also expect monetary returns from their investments (Ordanini et al., 2011). However, the majority of crowdfunders enjoy the investment experience which is linked to community benefits generated by the crowdfunding activity (P. Belleflamme et al., 2014). They enjoy the feeling of belonging to a group of special people, making an involved record in a special occasion, engaging in an innovative behaviour, being the first used highly interactive tools, and helping a friend or someone else to overcome a social or personal cause (Ordanini et al., 2011). In general, the participants are more likely to be motivated by the enthusiasm of the group of crowdfunders for the desired outcome of the new venture than ensuring monetary or other tangible incentives (Lehner, 2013).

Ordanini et al. (2011) found that crowdfunders are from groups of people with unforeseen, chaotic and complex behaviours. Thus, a small omission of firm's action can lead to a hyperbolic response (Lehner, 2013) and negatively influences the belief of potential investors (Ordanini et al., 2011). It leads to the fact that local investors are likely to invest earlier with more responsive decisions to projects created by trusted people even though equity crowdfunding is a global approach (P. Belleflamme et al., 2014).

Founders

Similar to other traditional funding methods, information asymmetry between entrepreneurs and crowdfunders is a challenge in any equity crowdfunding model (P. Belleflamme et al., 2014). To mitigate these difficulties, entrepreneurs rely upon the capabilities of the internet (Lehner, 2013) to establish their connections with the crowd during the funding process (P. Belleflamme et al., 2014). This process enables the entrepreneur to communicate to a global audience the potential of the idea and the qualities of the founding teams (Lehner, 2013).

Riedl (2013) found that entrepreneurs who already have large social networks are likely to be more successful in equity crowdfunding than those whose existing social networks are narrow. It is because social networks can help potential investors to access information related to the characteristics and reputation of entrepreneurs, and social information about other crowdfunder's decisions. However, according to P. Belleflamme et al. (2014), a successful equity crowdfunding is likely to rely on the quality of start-up toward possibility of delivering promised products or services rather than the quality of products or services.

To accurately provide credible signals and disclosure information about the quality of start-ups (P. Belleflamme et al., 2014), and to ensure that the process of an equity crowdfunding project was appropriately managed, Ley and Weaven (2011) suggest entrepreneurs need to have an initial screening criterion, and Weigmann (2013) advises creating a good website with a convincing video. All provided information should show that the project is technically savvy that consumers can appreciate and value (Riedl, 2013), and must contain the start-up's financial roadmap, board structure, and risk factors (Cumming & Johan, 2013). Ordanini et al. (2011) also found that a project without a minimum individual investment target is likely to attract more participants with small amounts of contributions. In contrast, an equity crowdfunding project is likely to fail if it requires too much funds, or already received external certifications such as awards and government grants because the crowd assume that the project were valuable then they do not need to raise any external equity (Cumming & Johan, 2013).

Governments

Mollick (2014) found that there has been a new trend in studying and exploring the potential and risks associated with equity crowdfunding to identify adequate policy action. Both intermediaries and policy makers are suggested to help entrepreneurs to create realistic plans and goals to ensure that their crowdfunding projects are low rate of fraud and high rate of growth. Thus, many countries including the United State, European state members, and Australia have introduced equity crowdfunding Acts to encourage and stimulate the innovation and entrepreneurship. These Acts have been established as exemptions to the Securities Act creating a big change in securities regulation in many ways (Schwartz, 2013).

First, the crowdfunding Act allows SMEs and start-ups to sell securities to not only business angels and venture capitalists, but also friends, relations and other investors through the internet. Second, the Act does not require a minimum investment per individual, and there is no limit on the number of investors leading to a possibility of huge number of investors involved in a project. However, the regulation limits the maximum amount money that each individual can invest each year to protect crowdfunders from potential loss, and a start-up can raise as a registration constraint applied to equity crowdfunding (P. Belleflamme et al., 2014). Finally, crowdfunding intermediaries are required to ensure that each investor understands the risk generally applicable to investments start-ups, the risk of illiquidity, and other appropriate matters. Such intermediaries have to check the background of the issuer's directors, officers, and substantial investors, provide such disclosures to reduce the risk of fraud, and authorize actions against those "make untrue" or omit statements to mislead the investors (Schwartz, 2013).

To leverage the equity crowdfunding activity of new start-ups, the regulation only requires a basic disclosure such as the name, legal status, address, website, the names of directors and officers, business plans, and financial conditions. Moreover, successful crowdfunded issuers have to provide annual reports of its financial statements and operational results. Issuers must offer their shares through the registered crowdfunding portal, and self-offerings are prohibited (Schwartz, 2013). These crowdfunded securities can be transferred between investors after one year or between family members. Thus, the secondary market of crowdfunded securities will be very small due to the number of share's orders from an equity crowdfunding issuer is smaller than in a registered one (Schwartz, 2013).

Cumming and Johan (2013) found that, in general, crowdfunders require more disclosure information from start-ups, a limitation on the number of entrepreneurs can raise crowdfunds, and a lower threshold of audited financial statements. Meanwhile, entrepreneurs prefer fewer disclosure requirements and restrictions on the ability to crowdfund, and a free trading of crowdfunded shares as well. Investors and portals are indifferent to crowdfunding laws, but both prefer non-strict regulations in order to maximise the crowdfunded capital and want strict regulations and mechanisms related to risk mitigation.

Proposed research agenda

The results from literature review have revealed the limits of our understanding about the nature of equity crowdfunding and its contributions to entrepreneurial activities. Thus, this paper proposes a research agenda for future equity crowdfunding studies in the entrepreneurial context towards three perspectives: Crowdfunders, entrepreneurs, and government.

Crowdfunders

Equity crowdfunding activities are facilitated by the internet, and involved funders who will be from a group of heterogeneous people. Because each individual has different values, self-pictures, needs and wants, it is difficult to predict the decision of a large heterogeneous crowd that behaves in unforeseen, chaotic and complex manners (Lehner, 2013). Thus, further research on the individual explanations of funders in the equity crowdfunding needs to be undertaken. Being a new topic, our understanding about the decisions of crowdfunders to commit financially to start-ups is still limit. Thus, this paper would suggest future researchers to employ behaviour theory (Brian L. Connelly et al., 2010) and grounded theory method to study the decisions and incentives of investors in equity crowdfunding.

Schwartz (2013) indicated that a limited disclosure of an equity crowdfunding project is likely to increase fraud and inaccurate information. Unlike other registered security method, equity crowdfunders have to make their decisions based upon such limited information provided by entrepreneurs through online platforms. It means either small or high net worth investors (business angels and venture capitalists) can not apply the normal due diligence process. Thus, a different study on special due diligence process for equity crowdfunders needs to be undertaken to help investors to acknowledge how to evaluate the provided data, market risk, people risk, technology risk, and monetary risk, and to make the investment decision.

Entrepreneurs

In equity crowdfunding, how to attract crowdfunders is the key element of a project. This depends on the business plan and communication strategy of the entrepreneurs. A business plan can be consist of market opportunity, product or service explanations, business model, people involved, financial, strategy, and dilution schedule. Although, P. Belleflamme et al. (2014) believe that an equity crowdfunding project per se serve as a signal of high-quality, this study proposes a future research on how to write a business plan and chose communication strategy to attract more investors in the condition that the internet platforms normally allow entrepreneurs to provide limited information.

In entrepreneurship research, the potential investors assess the readiness of new ventures to move to the next level when making an investing decision (Wiltbank et al., 2009). Each investor has different scales and ratings of the new venture's readiness basing upon technology, market, and management stage (Douglas & Shepherd, 2002), or the business, risk/returns ratio, and time to exit (Wiltbank et al., 2009). Additionally, studying the early stage financing of new ventures, other scholars have found that the funding decisions depend on the investor's perception of management skills, business model, potential market, growth perspective (Mason & Harrison, 2004), shortcut heuristic (Maxwell et al., 2011), and the presentation of entrepreneurs (Clark, 2008). In general, potential investors trend to look for the signal of future success from the new ventures when making funding decisions (Meseri &

Maital, 2001). Thus, this study suggests future researchers to employ investment readiness to study how a good equity crowdfunding proposal must be.

Furthermore, how large are the number of crowdfunders and the amount of capital needed for an equity crowdfunding project is a challenged question. So far, the current literature has not addressed this challenge and the entrepreneurs have to make their own decisions based on their experience or personal advisors. A studying about the methods of financial forecasting and assessing financial needs is required to help entrepreneurs to identify a reasonable amount of crowd equity. Moreover, because the shares of firms can be hold by strangers, risks and concerns will be raised for entrepreneurs even it is a single non-voting share (Schwartz, 2013). Thus, risk management for start-ups used equity crowdfunding method needs to be studied.

Asymmetric information, investment readiness and networks

Beside the uncertainty of the investment returns, information asymmetry plays an important role in the financial markets (Leland & Pyle, 1977). Entrepreneurs and investors unequally access to the information about the new ventures leading to the absence of perfect information (Certo, 2003). In fact, entrepreneurs possess more inside information about the true intentions, planned activities, and value of the firms than outside investors (Amit et al., 1990; Prasad et al., 2000); this asymmetric information can lead to the rejection of good investment opportunities or underinvestment (Myers & Majluf, 1984). An investment is likely to be undertaken when the financial providers are able to mitigate the risks derived from the information asymmetry problems (Cumming & Johan, 2008). However, in equity crowdfunding, the limited disclosure information seems to aggravate the asymmetric information problem between investors and investees (P. Belleflamme et al., 2014).

Investors can reduce the information asymmetry regarding to the intentions and planned activities of entrepreneurial teams, and the value of new ventures through contingency (incentive) contracts and monitors (Kreps, 1997). The asymmetric information can be alleviated via signals (Certo, 2003) conveyed by the knowledgeable parties or/and through screening activity which seeks for additional information from uninformed parties (Lee & Venkataraman, 2006; Carpentier et al., 2010). These parties can have direct or indirect relationships with entrepreneurs, and they thus can receive relevant information about the entrepreneurial teams.

Nofsinger and Wang (2011) argued that entrepreneurs at early stages may rely on their social networks. Many scholars have proved that social ties provide a potential mechanism to reduce the information asymmetry between potential investors and entrepreneurs (Uzzi, 1996; Freiburg & Grichnik, 2012). Social networks also provide additional information about the values of new ventures (Granovetter, 2005), and leverage the trust between entrepreneurs and financial providers (Kautonen et al., 2010) eventually positively influence the investment decision. Even Mollick (2014) found that "threshold funding, active participation by large communities, frequent interaction between founders and potential funders, and the ability of founders to broadcast signals of quality" are likely to help the crowd to identify quality projects and reduce the change of fraud, our understanding about the roles of social networks in equity crowdfunding is still limited.

Ownership and control

Equity crowdfunding not only is the mean for entrepreneurs to share risks to other investors but also disperses their control and governance on start-ups. Shareholders can gain their control of the firms by purchase shares from other holders (Schwartz, 2013). The increasing dispersion of control may impede the entrepreneurial activities of entrepreneurs in performing their experimentations, adjusting the business strategy, and entrepreneurial innovation. How to balance the benefit of equity crowdfunding with the disadvantages generated by the dispersion of control is a challenged question.

Moreover, in equity crowdfunding, shareholders of start-ups generally have the right to vote and coordinate, and all activities are facilitated through the internet (Schwartz, 2013). Agency theory could be adopted to investigate the cost-control mechanisms of equity crowdfunding model which reflect the likely acceptance of the investor-investee relationships in start-up finance. Future research on how the ownership and control rights of crowdfunders can be managed through internet must also be undertaken.

Mollick (2014) found that large numbers of successful crowdfunding projects delated to deliver their promised products because of the increase of crowdfunder's expectations in the complexity and scope of the project. Thus, several relevant questions on how to ensure that initial resource endowments prove adequately to mitigate the risk of delay or failure, how a successful equity crowdfunding project develops and delivers promised products or services, and how entrepreneurs can develop an altering plan if necessitated need to be answered.

Regulatory environment

The regulation landscape for equity crowdfunding around the world provides a fascinating new financial market (Cumming & Johan, 2013). Although over billion dollars invested by millions of crowdfunding backers, complete regulations to encourage the equity crowdfunding activity of entrepreneurs and academic knowledge on this domain are still limited (Mollick, 2014). Shiller (2013) believes that equity crowdfunding is not only an exciting concept but also a dangerous innovation because it can be used to abuse people, so it needs to be constantly updated and improved. Similar to public offering of a company's securities, equity crowdfunding faces multi-faceted challenges including regulatory hurdles, governance and control (Lehner, 2013), and requires a high regulation to prevent fraud and ameliorate crowdfunding market. Moreover, Cumming and Johan (2013) proposed that there are potential risks associated with equity crowfunding, such as entrepreneurs dilute the equity stake held by crowdfunders by issuing more shares to themselves, pay themselves more, and not invest in the project after successfully finishing the crowdfunding campaign. Thus, studying the advantages and disadvantages of the current regulations will help policy makers to improve relevant acts to encourage practical equity crowdfunding activities. Future researchers need to find out how to perfect relevant regulations in the national context, as well as in the international environment because equity crowdfunding is a global financing method.

Conclusion

This paper provides a theoretical review of the extant literature and develops from that review an agenda for future research. The study identifies the core themes of research in relation to equity crowdfunding; these were identified as equity crowdfunding in entrepreneurship context, fund receivers (entrepreneurs), crowdfunders, and regulatory environment (the government). The paper describes how crowdfunding was conceptualised in management studies and how the notion of equity crowdfunding as an alternative source of funding for early stage firms was emerged. The paper also scrutinize the equity crowdfunding within the context of early stage firms from the perspectives of the investor, entrepreneur and government to highlight the contributions made by equity crowdfunding and possible gaps in the literature that could help inform the future research. Based upon the findings of the theoretical review, the paper suggests research directions in which future researchers can employ behaviour theory (Brian L. Connelly et al., 2010), agency theory (Arthurs & Busenitz, 2003), and signalling theory (B. L. Connelly et al., 2011) to explore, investigate, and accomplish our understanding about equity crowdfunding in the entrepreneurial context.

While the findings from the review are robust, it is acknowledged that there are areas within the research process that could impinge upon strength of the work. In comparing the requirements of a systematic review, the number of collected articles was restricted because of the limitation on the number of published papers in equity crowdfunding. Moreover, those recently published articles have been written a few years ago before publishing on top journals. Thus, it suggests reviewing more working papers on SSRN or anywhere else to capture more up-to-date discussions in relation to research topics in equity crowdfunding.

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